

Montana Driver Education and Training

Basic Control Tasks



Standards and Benchmarks

1. Laws and Highway System

- c. consistently demonstrate knowledge and understanding by responsible adherence to highway transportation system traffic laws and control devices

2. Responsibility

- b. demonstrate the ability to make appropriate decisions while operating a motor vehicle
- c. consistently display respect for other users of the highway transportation system
- d. develop habits and attitudes with regard to responsible driving

3. Visual Skills

- a. know proper visual skills for operating a motor vehicle
- b. communicate and explain proper visual skills for operating a motor vehicle
- c. demonstrate the use of proper visual skills for operating a motor vehicle
- d. develop habits and attitudes with regard to proper visual skills

4. Vehicle Control

- a. demonstrate smooth, safe and efficient operation of a motor vehicle
- b. develop habits and attitudes relative to safe, efficient and smooth vehicle operation.



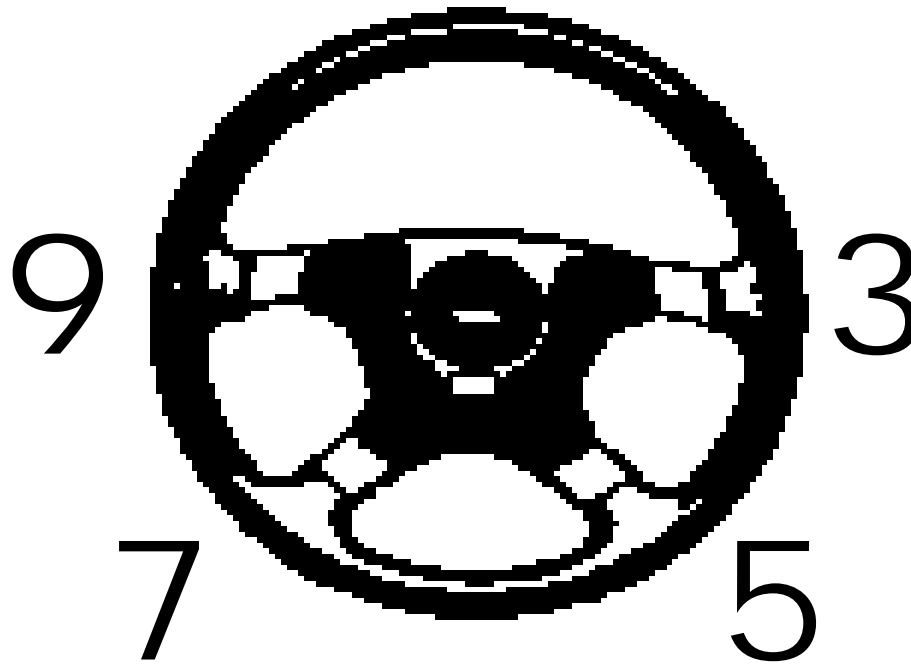
Starting Tasks

- ✓ Check/set park brake
- ✓ Right foot on brake pedal, heel on floor
- ✓ Left foot on "dead pedal"
- ✓ Key in ignition, turn to start
- ✓ Check alert, warning lights and gauges
- ✓ Adjust ventilation, accessories



Pre-set Hand Positions





Advantages of these hand positions





1968 Chevrolet Camaro SS Convertible Lemans

4-6 complete revolutions to turn the steering wheel from locked to locked position



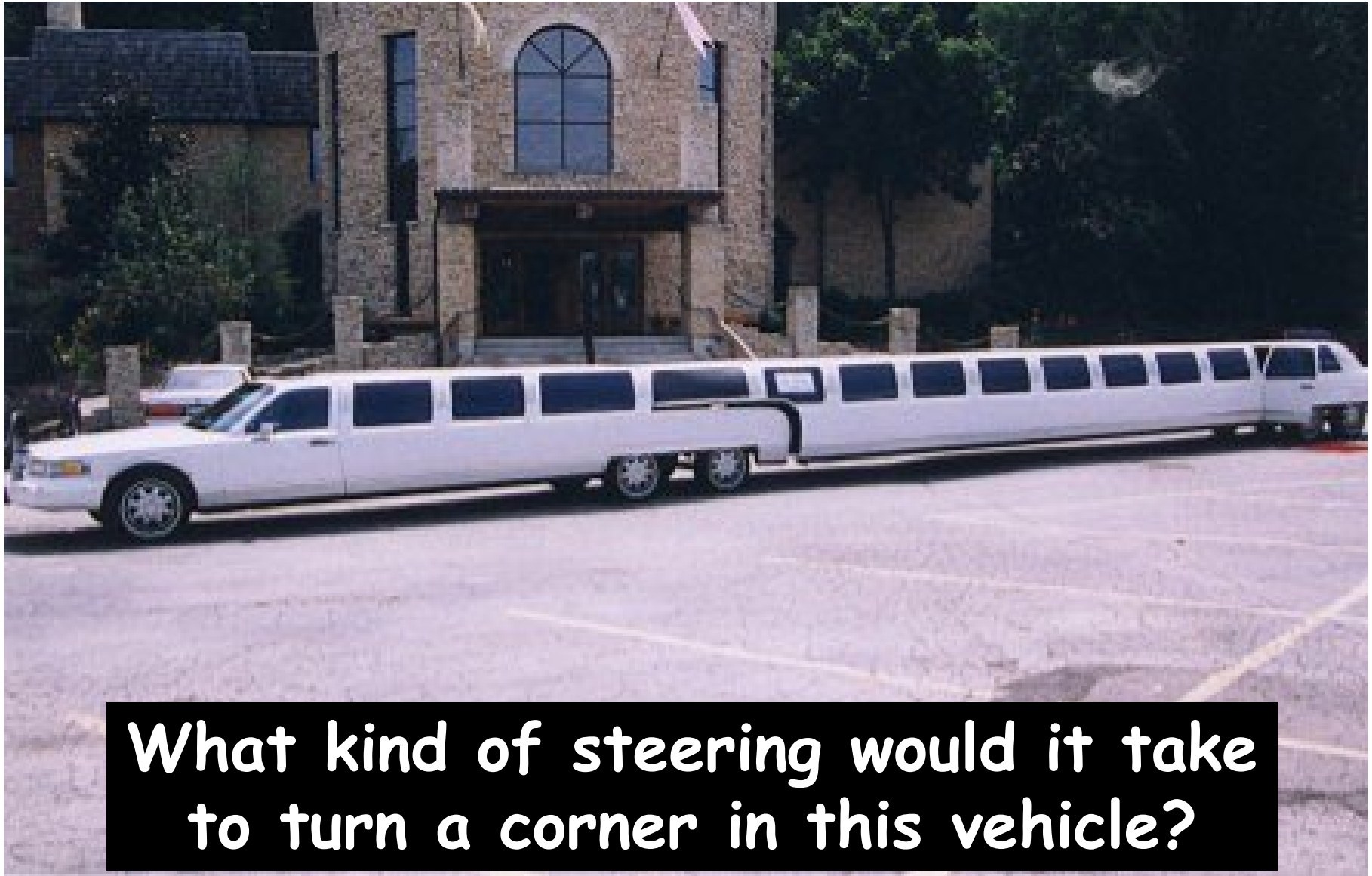
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Ford Taurus 2001



Only 2 $\frac{1}{2}$ revolutions
to turn the steering
wheel from locked to
locked positions



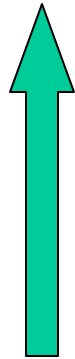


1999 Lincoln Town Car Limousine

Hand-to-Hand Steering

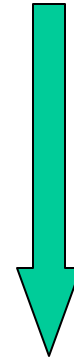
• Right Turn

• Left Hand Pushes Up



• Right Turn

• Right Hand Pulls Down



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Hand-Over-Hand Steering

Used with Speeds below 15 mph

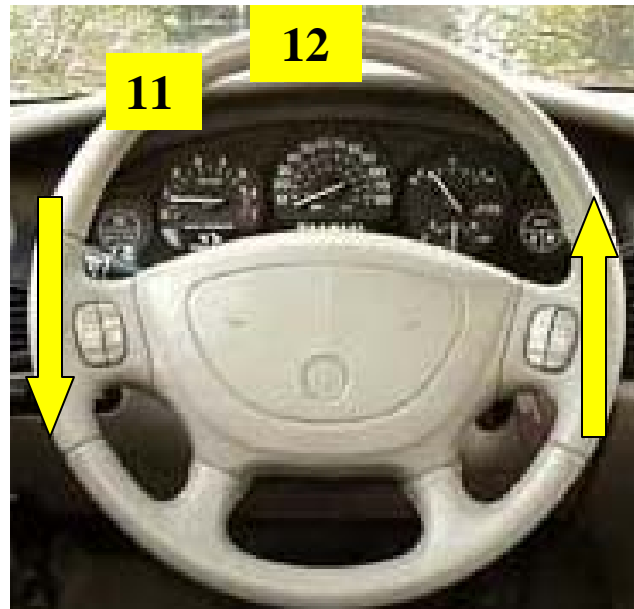
Left Turn

Left hand pulls down, then reaches up to about the 11-12 position and continues to pull down to the left

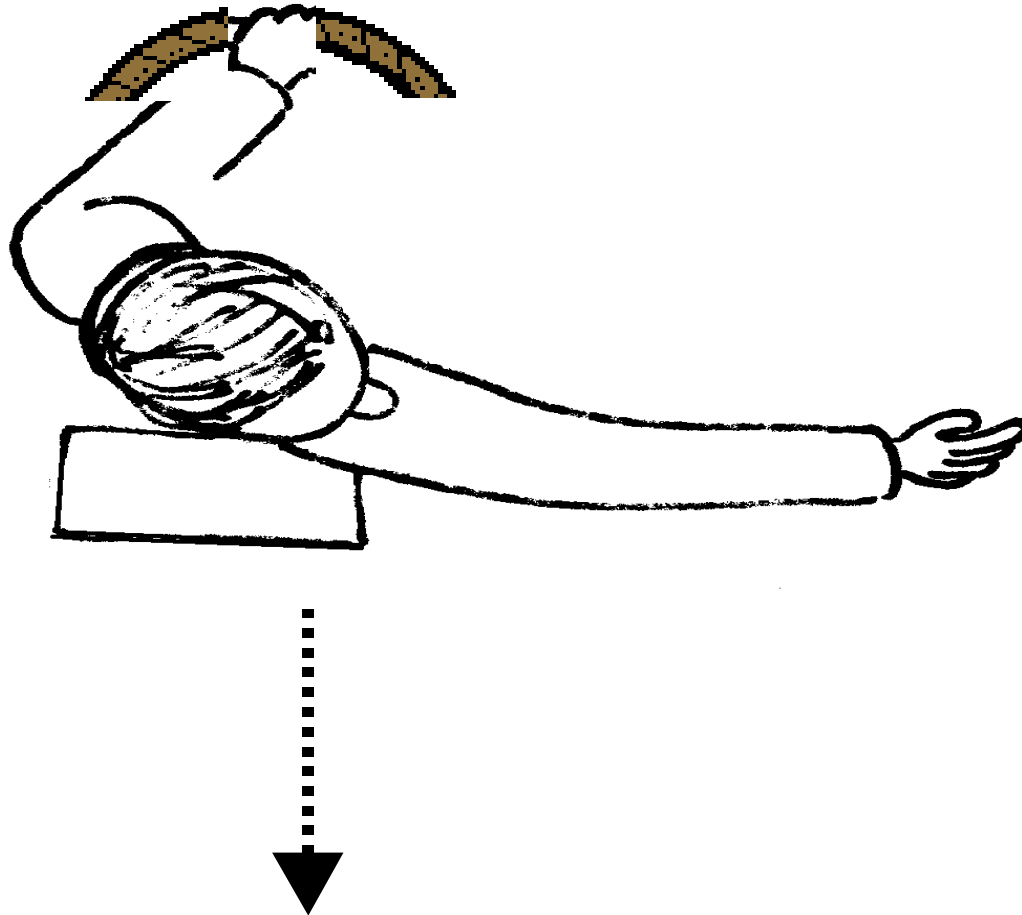
Continue pulling on the top 1/3 of the wheel until desired path of travel is reached

Left Turn

Right Hand pushes up to about the 11 position

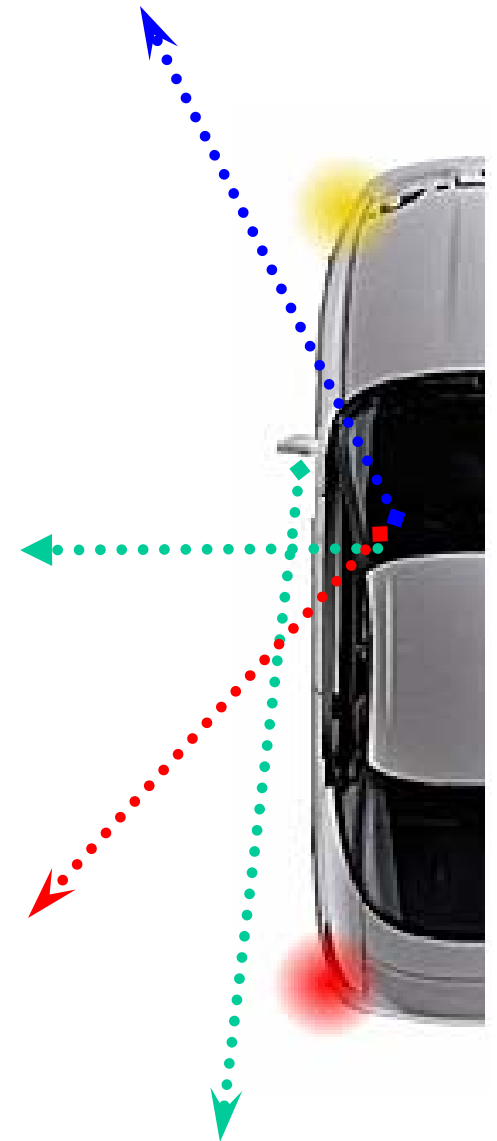


One Hand Steering – Backing Straight



Moving from a Stopped Position

- ❑ Foot Firmly on Brake,
Heel on Floor
- ❑ Shift to Proper Gear
 - Overdrive, Drive, or Reverse
- ❑ Check Traffic
 - ✓ Forward, Rear, and Sides
- ❑ Signal
 - ✓ Communicate Intentions



Moving from a Stopped Position

- ☐ Release Parking Brake
- ☐ Check Traffic
- ☐ Select Gap in Traffic Flow
- ☐ Move to New Lane
 - Use Progressive Acceleration





Targeting

A "Target"
is a fixed
object in
the center
of the path
you intend
to drive

What is the
target in the
driver's path of
travel?



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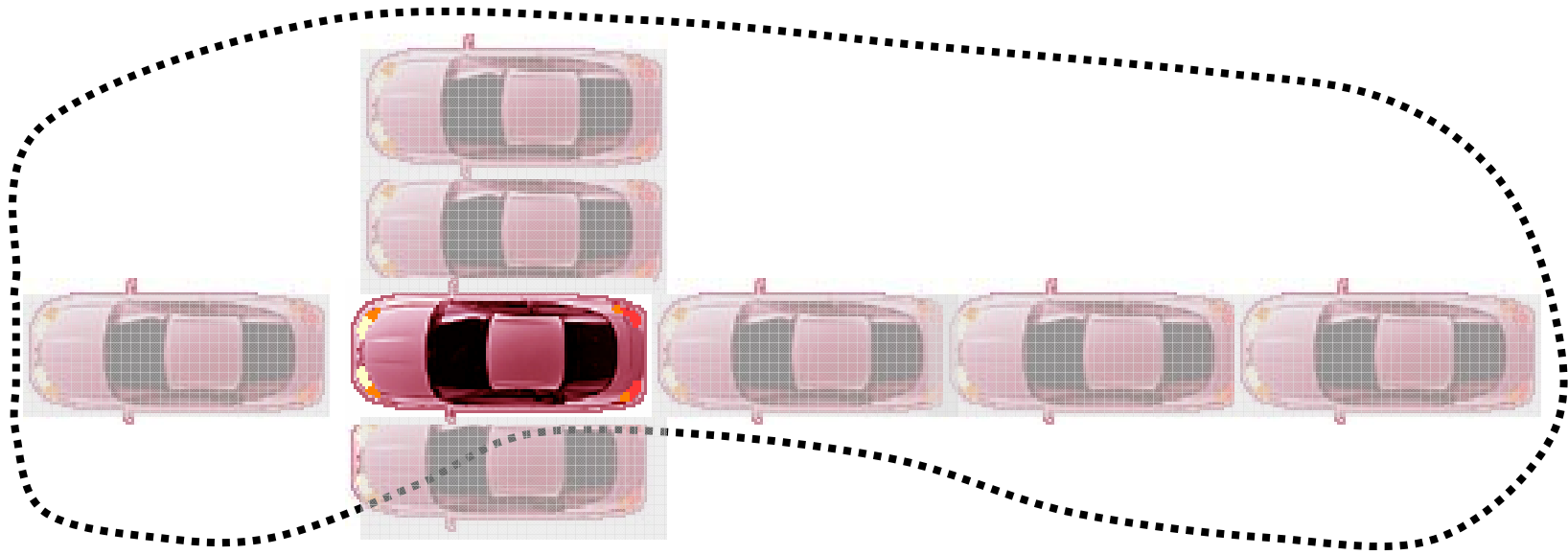
Target Area

The Target area is the area to the left and right of your target



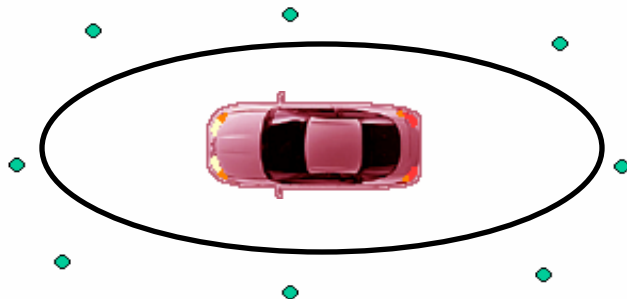
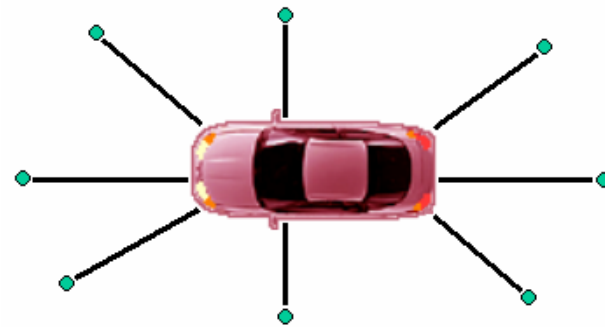
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Ground Areas Around the Vehicle the Driver Can't See



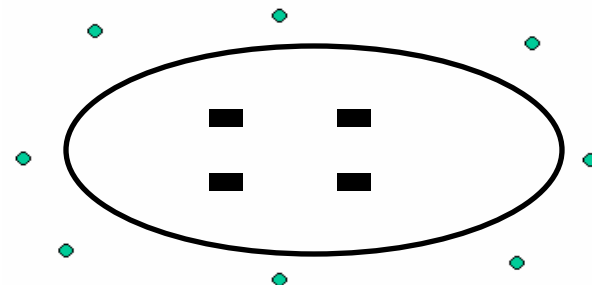
Locating Vehicle Blind Areas

Place markers (cones, milk cartons, people) at the point where the driver can see the marker on the ground



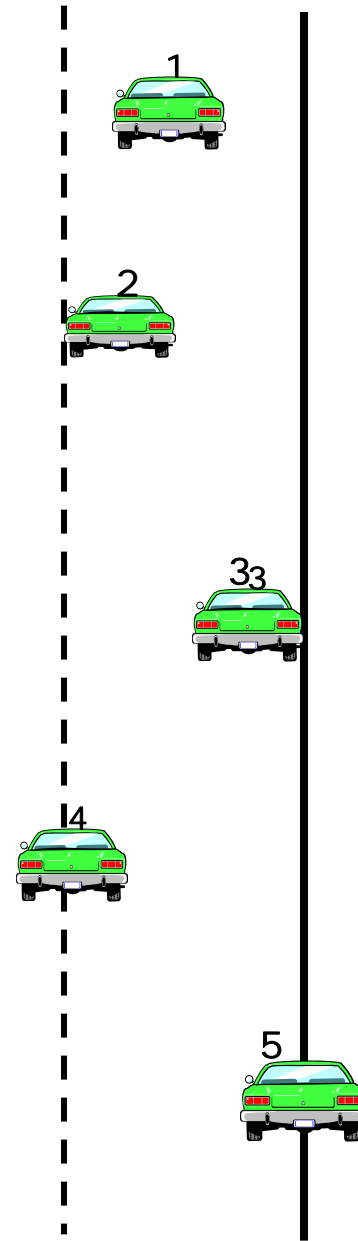
Draw the space area around the vehicle

Mark the tire patches prior to moving vehicle

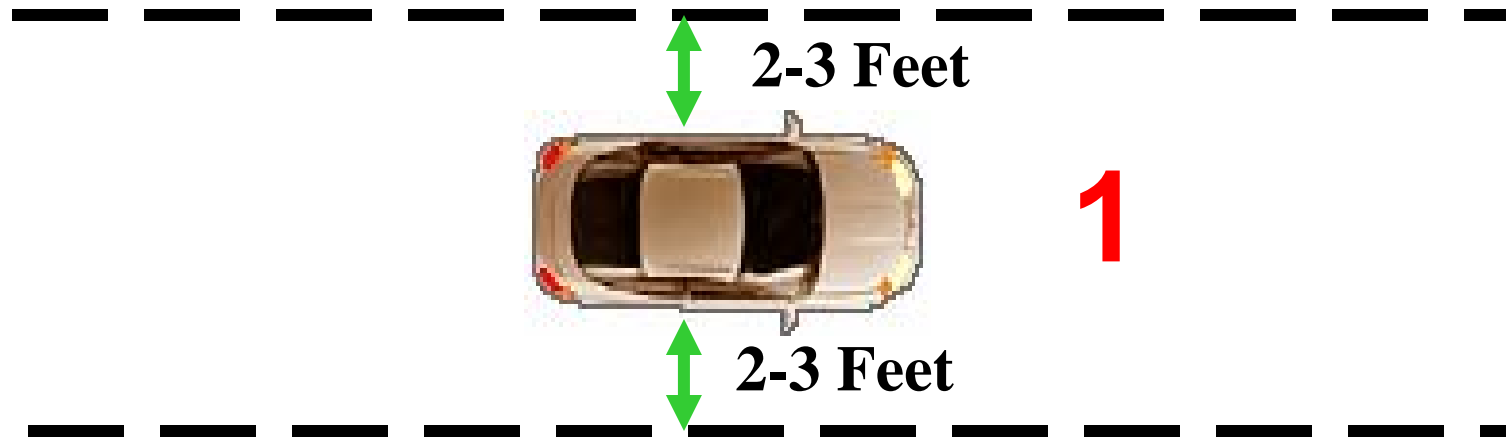


MAXIMIZE LANE USE

Use the lane position that gives you the best line of sight and path of travel.
This diagram is based upon an average 12 foot wide lane.



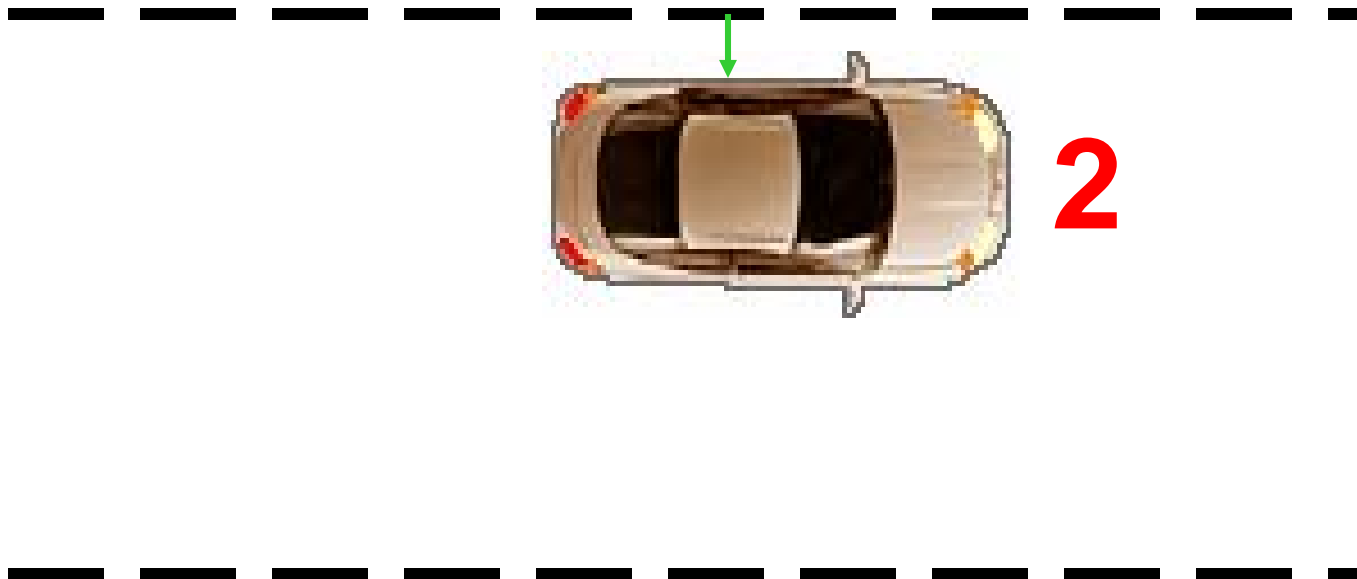
Lane Position 1



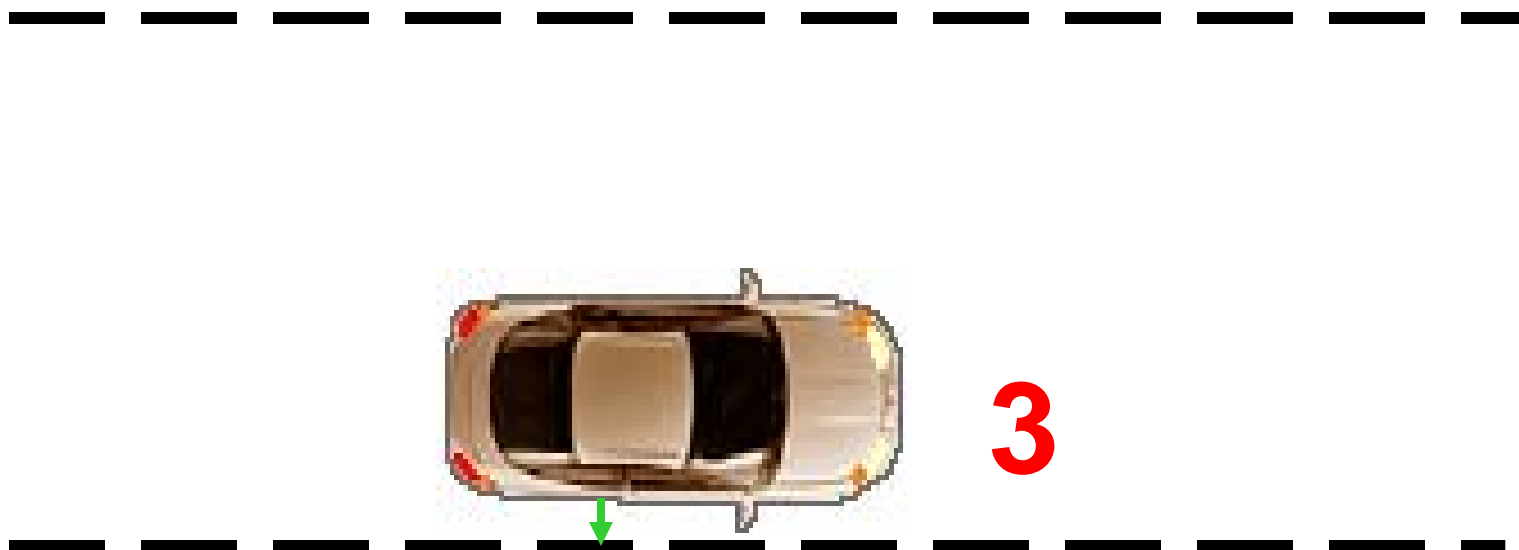
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Lane Position 2

3-6 Inches



Lane Position 3

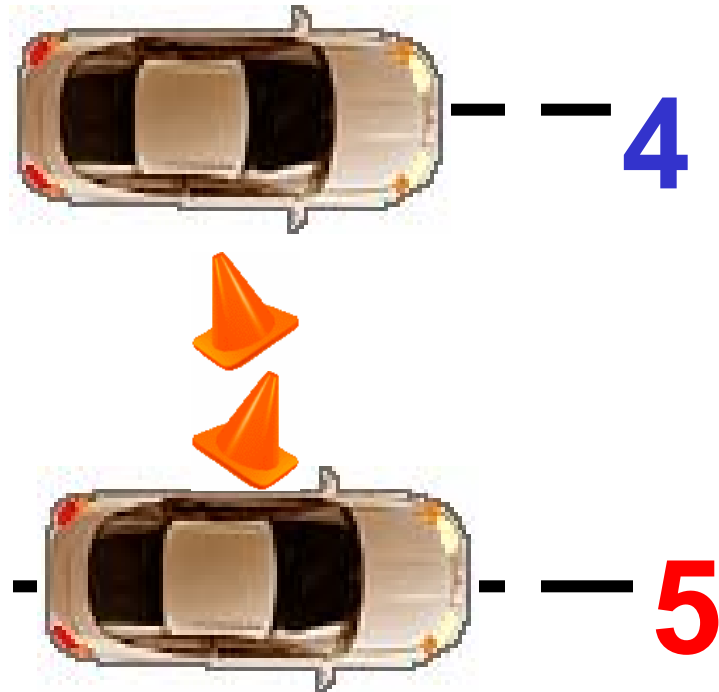


3-6 Inches



Lane Positions 4 and 5

Lane positions
4 and 5 -
straddling the
line to avoid a
problem



Standard Vehicle Reference Points

From the driver's seat, see some part of the vehicle as it relates to some part of the roadway, to know where the vehicle is actually located.

- Relates a part of the vehicle to some part of the roadway
- Know your vehicle placement within a lane at all times
- Maneuver in confined places



Left Side 3-6 Inches



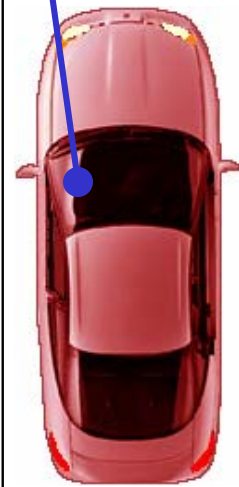
When you look at the curb, pavement line, or edge of the road, it appears to line up about one foot in from the left edge of the hood.



Left Side 3-6 Inches

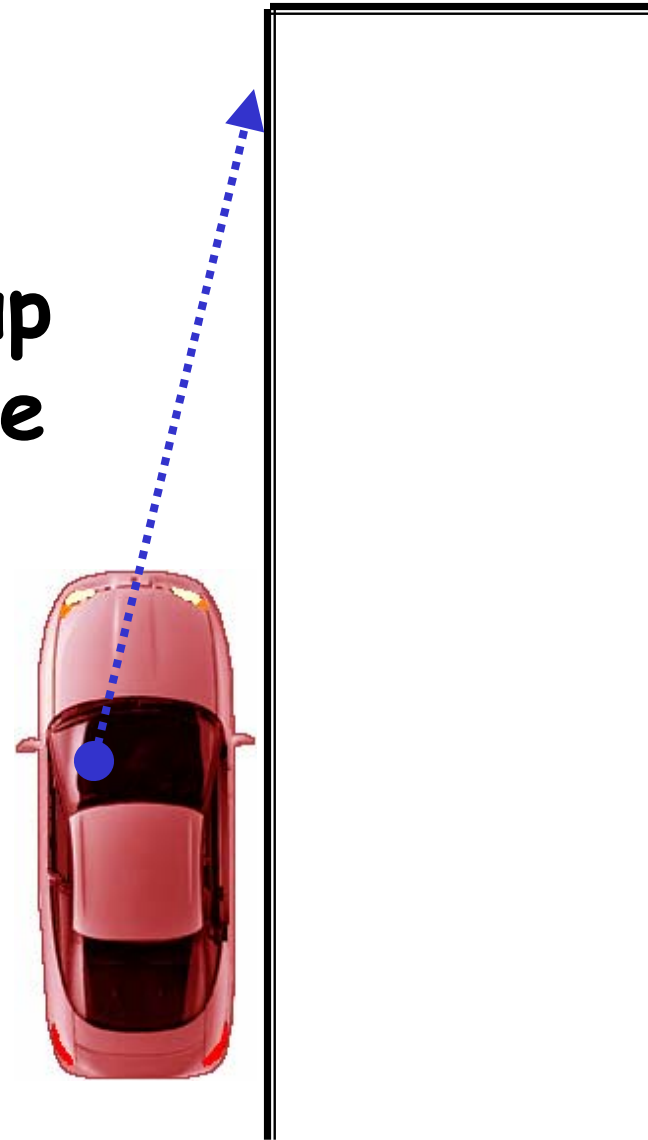
How it is used:

- Lane Position 2
- Preparing for a left turn
- Parking



Right Side 3-6 Inches

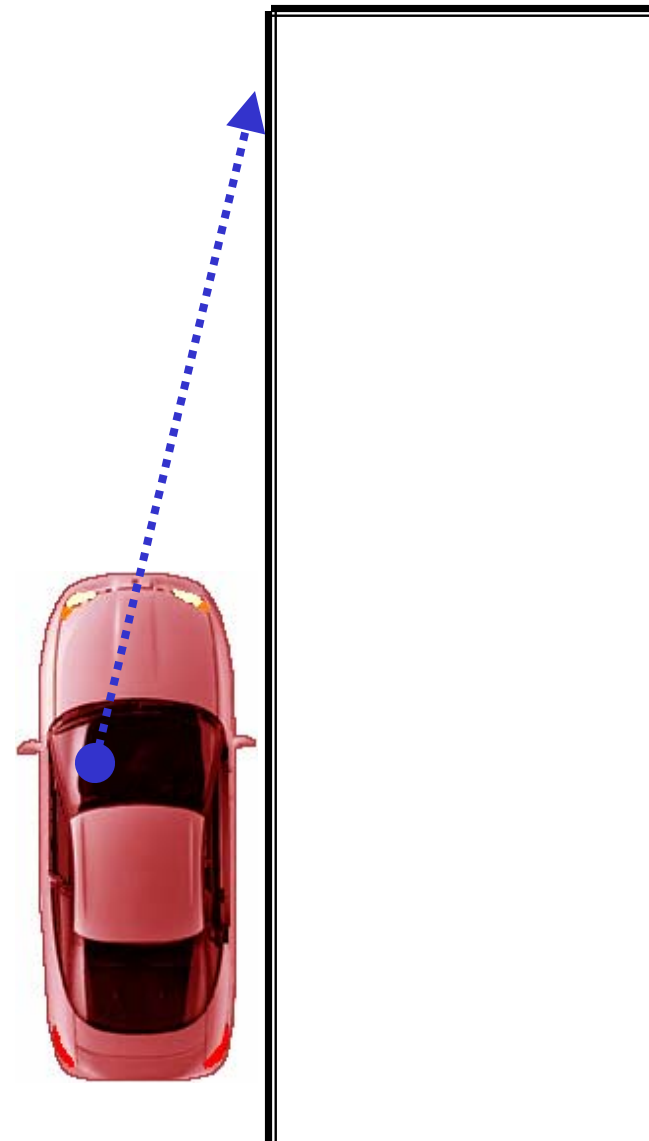
The curb, pavement line or edge of the road appears to line up near the center of the hood



Right Side 3-6 Inches

How it is used:

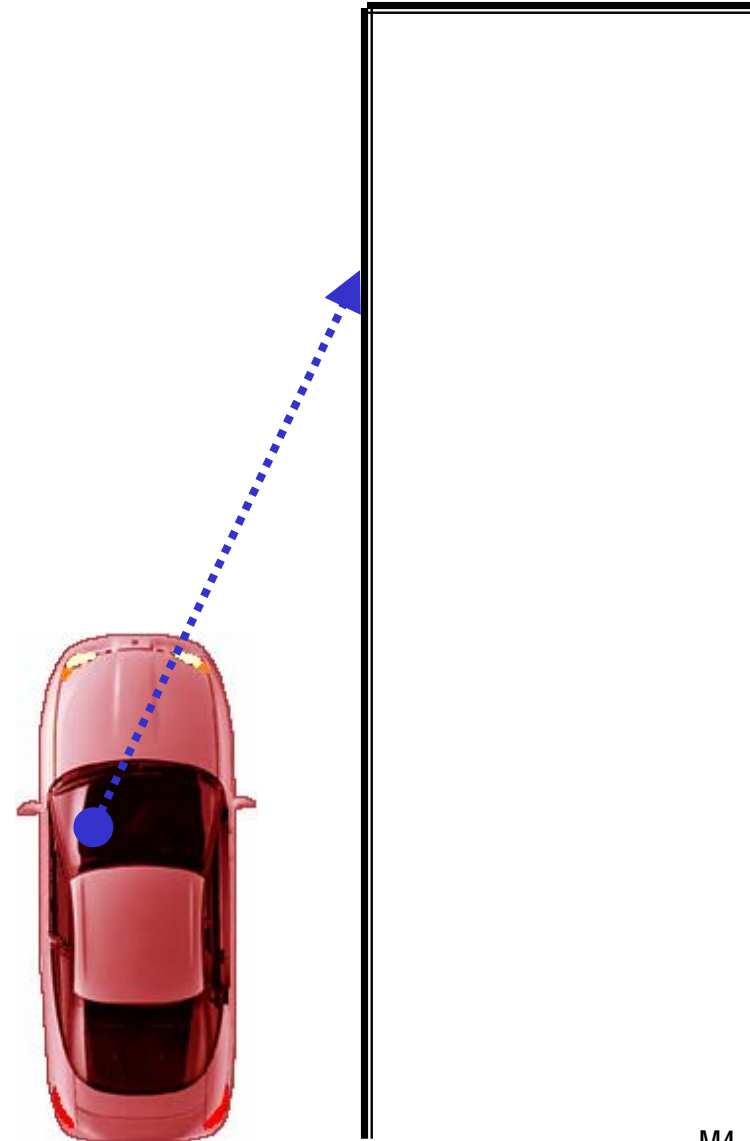
- Lane Position 3
- Parking



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Right Side Three Feet

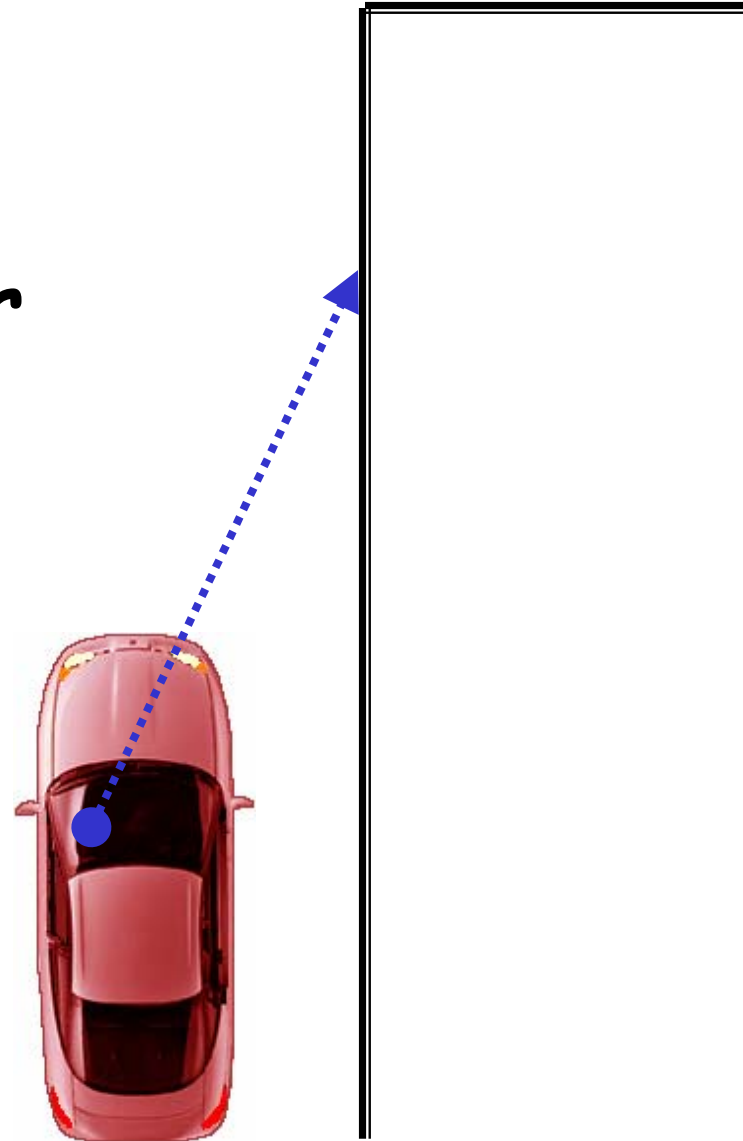
When you look at the curb, pavement, or edge of the road, it appears to line up with the middle of the right half of the hood



Right Side Three Feet

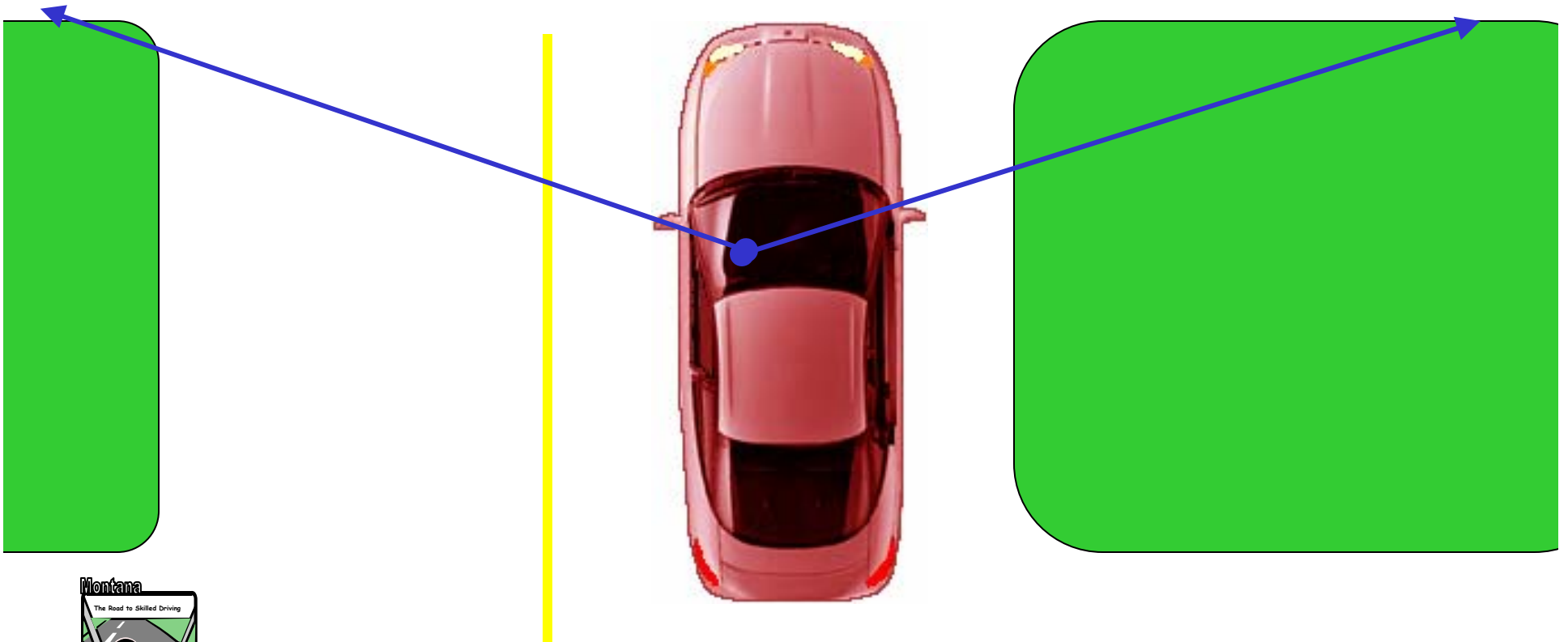
How it is used:

- Side Position for a right turn
- Lane Position 1



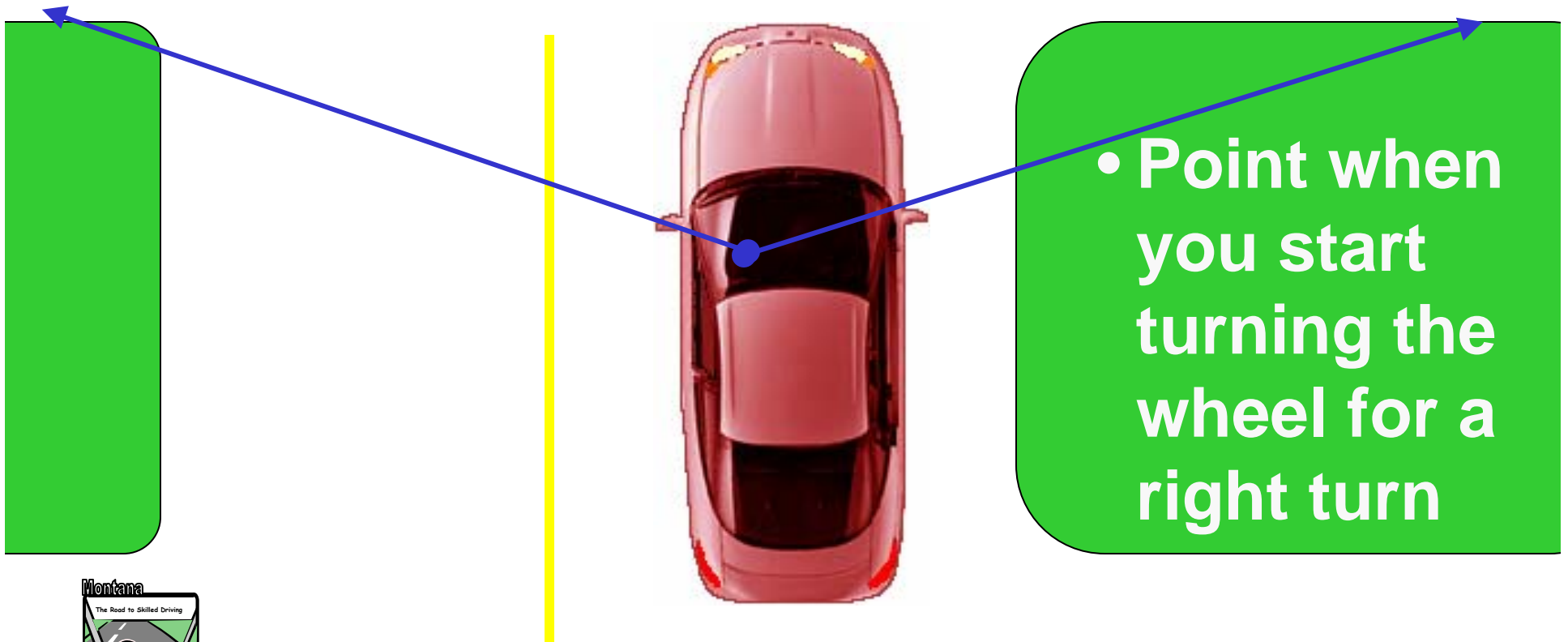
Front Limitation

When you look at the curb line it appears to line up with the side view mirror



Front Limitation

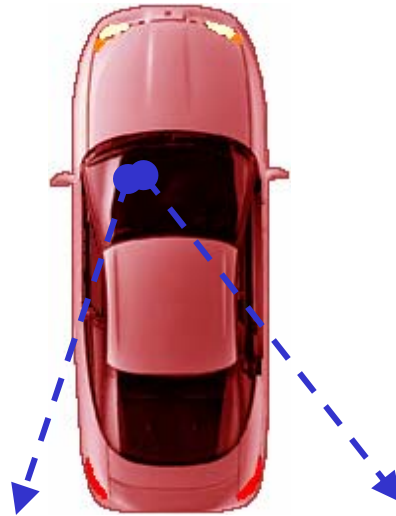
How it is used: - Safety Stop to get a clear view
- Precision legal stop



Rear Limitations

LEFT

When you look back over your left shoulder, the curb or line appears to be in the middle of the left rear window



RIGHT

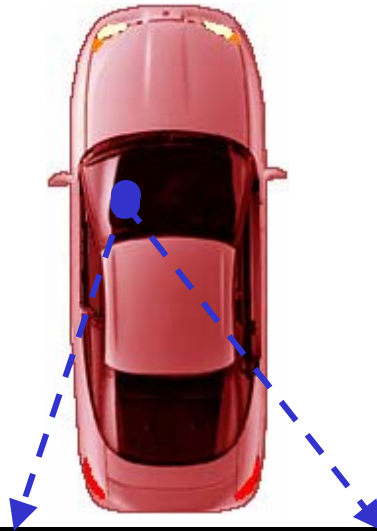
When you look back over your right shoulder, the curb or line appears to be near the rear window corner post



Rear Limitations – How They are Used

LEFT

When backing to know where your rear bumper is



RIGHT

When backing around a corner, it's the pivot point for turning, such as backing into a perpendicular parking space



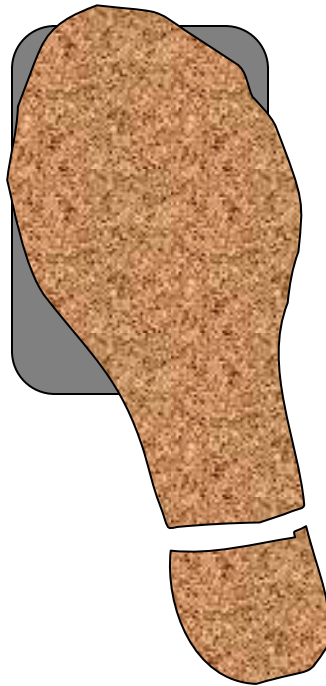
Braking Basics



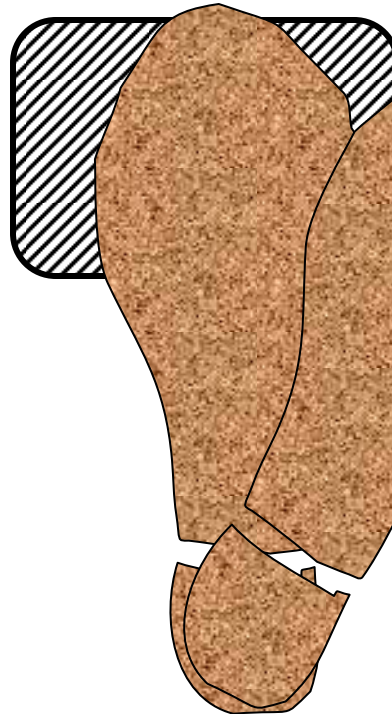
The key is to stabilize the foot by keeping the heel on the floor



Dead Pedal



Brake



Accelerator



Left foot on Dead Pedal, right foot pivots

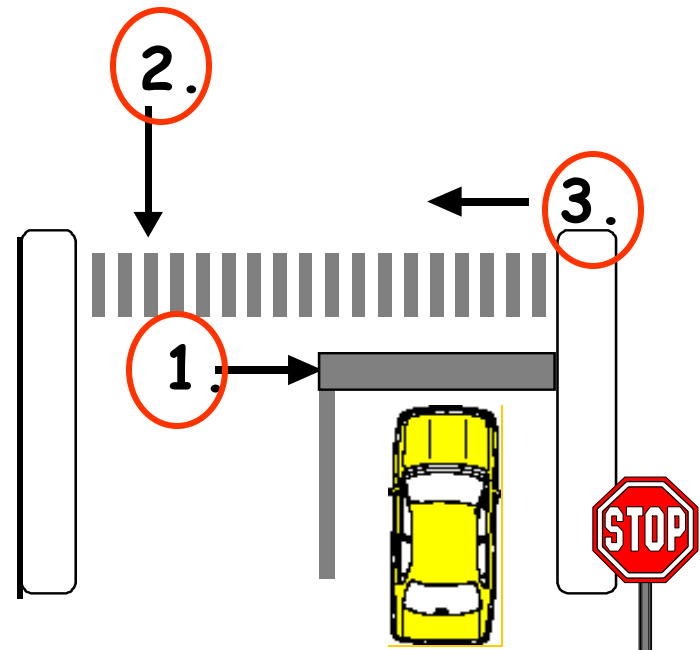


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Where to Stop

The three legal stop positions:

1. Before the Stop Line, or
2. Before the Crosswalk, or
3. Before the Intersection



Four Braking Techniques

1. Release the Accelerator

Slows the vehicle by transferring weight to the front of the vehicle



2. Controlled Braking

Smooth, steady braking to bring the vehicle to a stop



Good Habits

- Check rear view and side view mirrors
- Apply smooth, steady, squeezing pressure on brake pedal
- Ease off brake few seconds before stopping for a smooth stop – curl toes back



3. Threshold Braking

Slows the vehicle as quickly as possible without locking brakes or losing traction



Good Habits

- Release accelerator
- Keep heel on floor, apply steady, maximum brake pressure without lockup
- Release brake pressure few seconds before stopping for a smooth, non-jerky stop
- Check traffic to rear and sides



4. Trail Braking

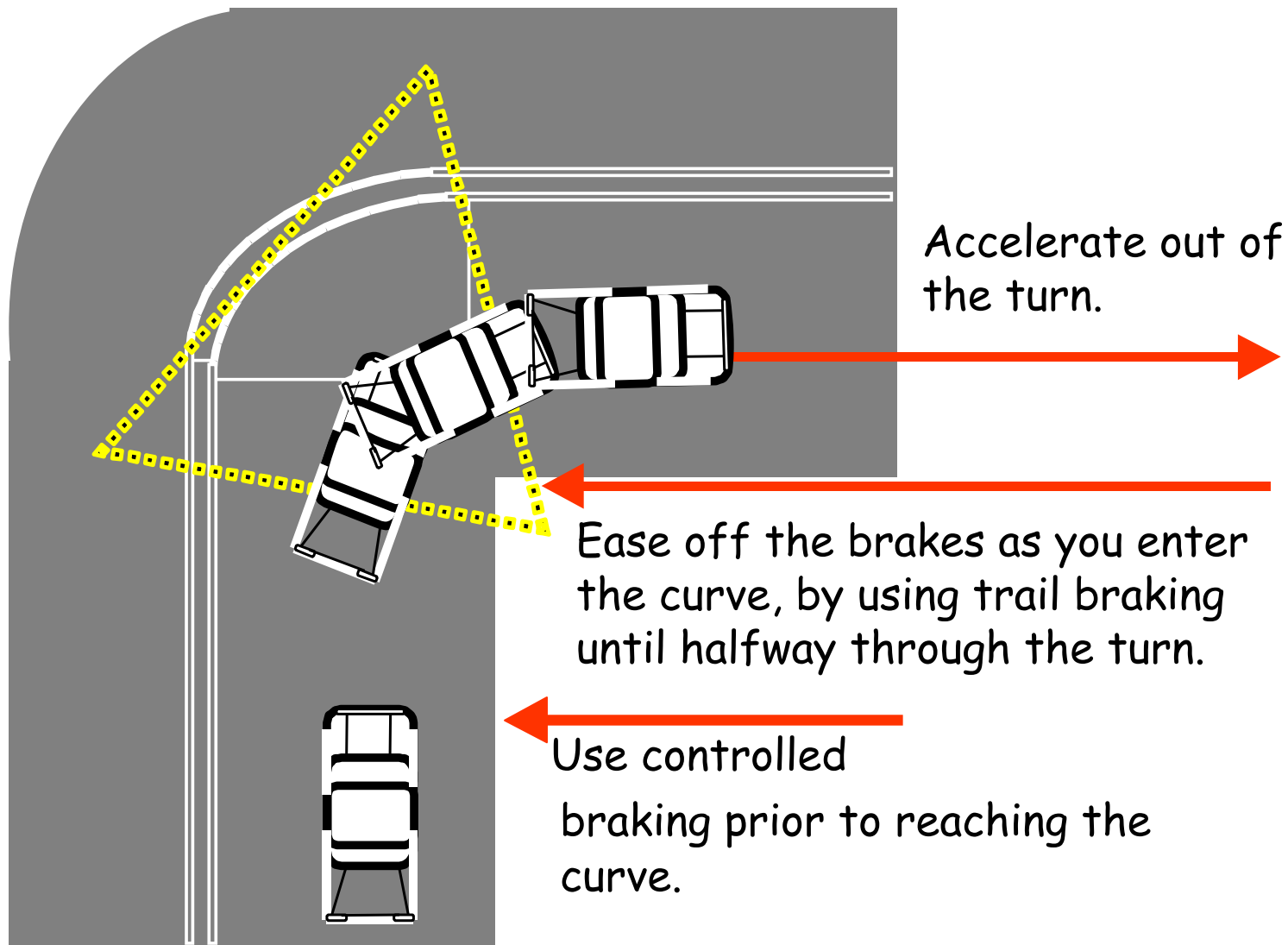
Used while turning to maintain balance and steering control



Good Habits

- On entry to a turn or curve, use controlled braking prior to any steering movement
- As you enter the turn, ease off the brake and maintain slight braking pressure until halfway through the turn, then accelerate out





Acceleration Techniques

1. Progressive Acceleration: To gradually gain speed



Good Habits

- Move foot off the brake
- With heel on floor, place foot over the accelerator pedal
- Squeeze accelerator to gradually and progressively pick up speed from 2 mph to desired speed



Acceleration Techniques

2. Thrust Acceleration: For maximum speed increase without losing traction



Good Habits

- With heel on floor, firmly push accelerator to quickly pick up speed without traction loss



Precision Turns

A precision turn is the ability to consistently perform left and right turns from a stopped and moving position with a pre-determined idea of where you want to begin and end the turn.



Precision Turn Advantages

- Able to determine target area and path of travel
- Use the least amount of space necessary
- Precision braking and acceleration for entry and exits
- Accurate steering to the new path of travel
- Increase ability to plan ahead
- Make tight turns



Precision Turn Approach



- Signal
- Check Mirrors
- Search Intersection



STOP



STOP



Precision Turn Approach



- Get side position
- Legal Stop



STOP



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Precision Turn Approach



•Get forward position for the turn - even with the curb line

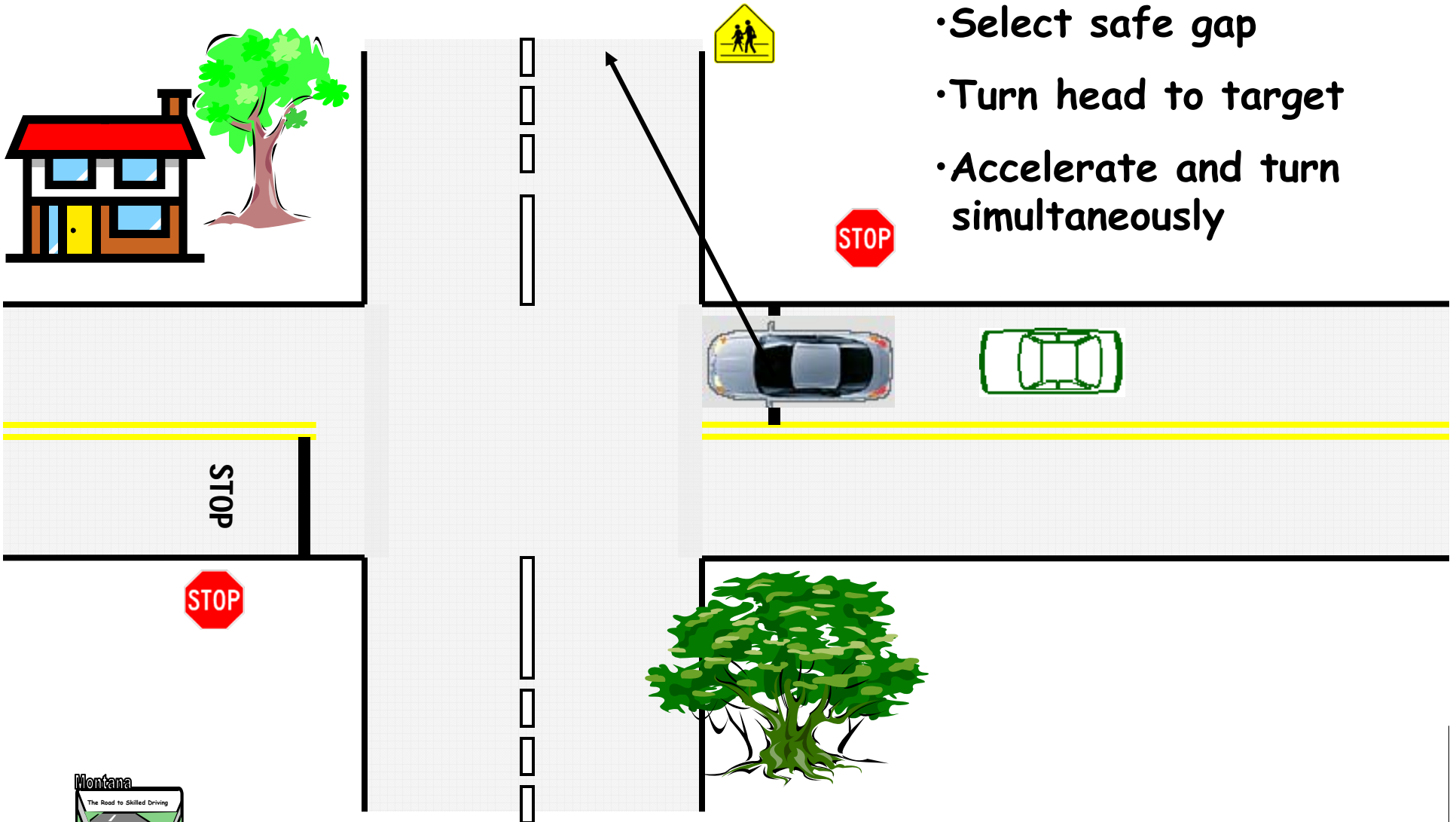


STOP



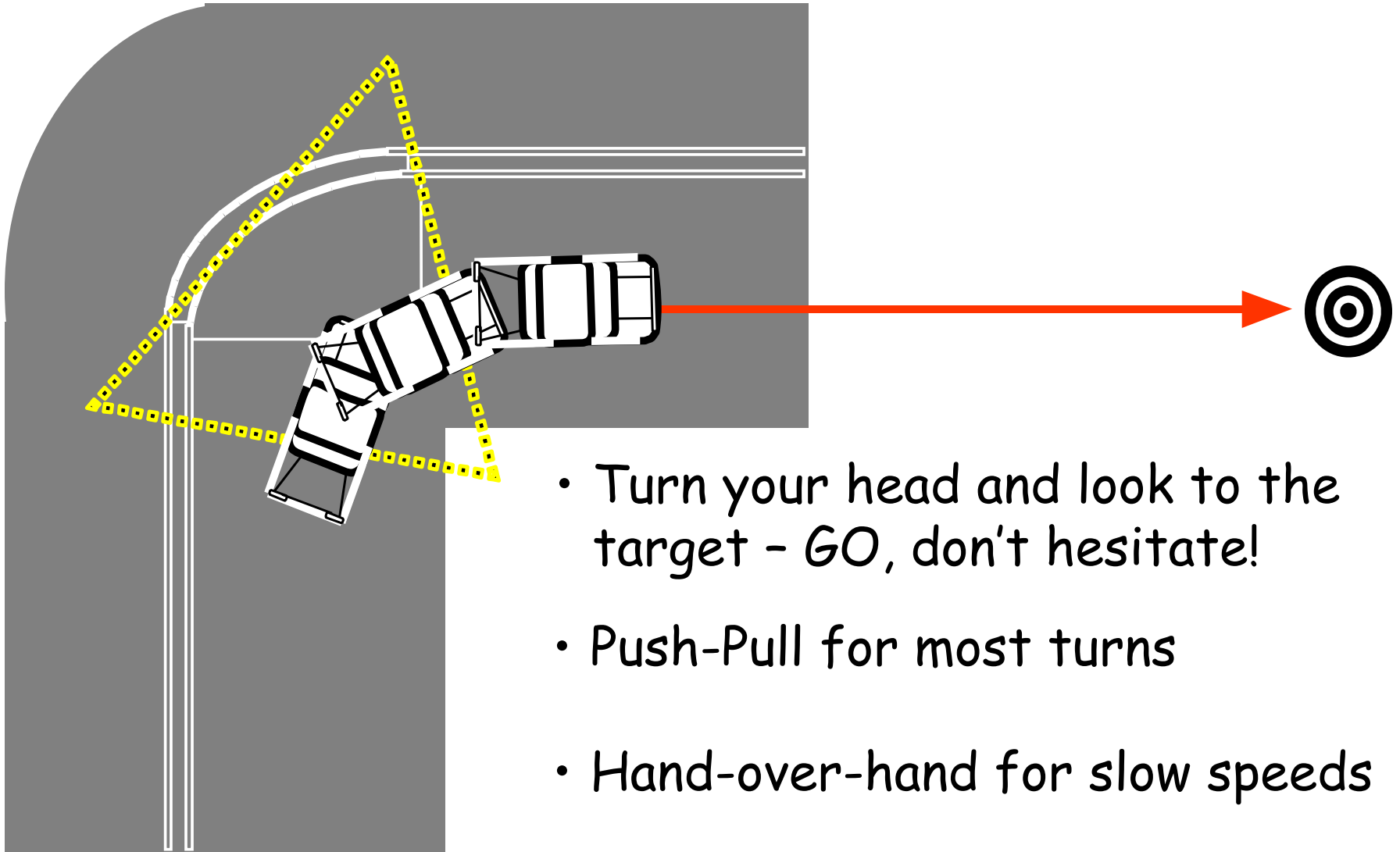
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Precision Turn While Turning



- Select safe gap
- Turn head to target
- Accelerate and turn simultaneously





- Turn your head and look to the target - *GO*, don't hesitate!
- Push-Pull for most turns
- Hand-over-hand for slow speeds
- Use trail braking if the brakes were applied going into the turn



Transition Pegs



Left Turn

Recover the wheel
when the target
intersects with the
corner window post

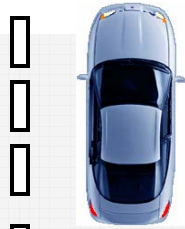


Right Turn

Recover the wheel
when the target
intersects with the
rear view mirror



Precision Turn Exiting



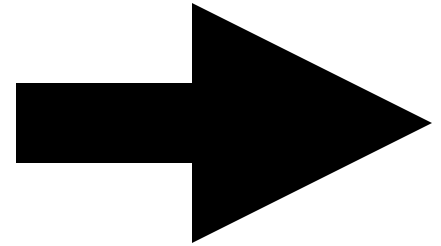
- Smooth acceleration out of the turn
- Check rearview mirror

STOP





Backing Straight

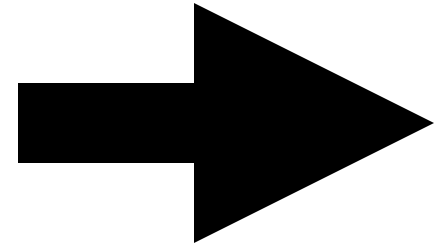


- Check clear path of travel
- Foot on brake, shift to reverse
- Shift body weight
- Left hand at 12 o'clock, right hand on passenger seat for balance
- Look back and creep slowly
- Look back until stopped





Backing & Turning



- Check for clear path of travel
- Foot on brake, shift to reverse
- Both hands on wheel in balanced position
- Look back and control speed and movement
- Use hand-over-hand
- Check front clearance frequently

